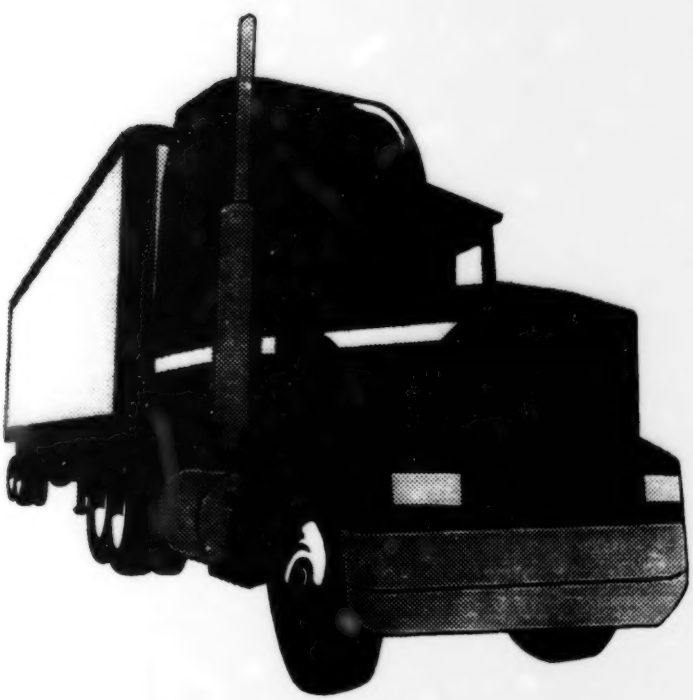
OCCUPATIONAL INJURY AND DISEASE IN ALBERTA

Trucking, 1994 to 1998



Alberta
Trucking Safety
Association
Industries

Alberta
HUMAN RESOURCES
AND EMPLOYMENT

July 1999

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TRUCKING SAFETY ASSOCIATION INDUSTRIES

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Alberta Human Resources and Employment, Information Services **July , 1999**

1. Introduction

The Mission of Alberta Human Resources and Employment

The mission of Alberta Human Resources and Employment is to work in partnership with Albertans to promote safe and healthy workplaces, a quality working life and comprehensive health and safety systems. To this end, Alberta Human Resources and Employment recognizes that monitoring health and safety in Alberta will help to ensure that primary workplace health and safety concerns are actively managed and prioritized and resources directed where most needed.

This report summarizes the lost-time injuries and disease descriptions, characteristics of the injured worker, and the risk of injury to workers in the Alberta Trucking Safety Association industries between the years 1994 and 1998. A summary of occupational fatalities accepted by the Workers' Compensation Board (WCB) and detailed description of those fatalities investigated by Occupational Health and Safety (OHS) are also provided. Cost of injuries and revenue in terms of insurable earning and premiums and number of employers in the industry that received/renewed a Certificate of Recognition (CoR) in 1998 are also provided.

2. Industry Description

Specialized Trucking Services (Industry # 50701)

This industry describes the operation of specialized for-hire trucking equipment to allow for specialized off-loading services, off-highway transportation, and to accommodate the transportation of over-sized and/or overweight loads, such as large construction equipment/cranes, length of precast concrete, plant equipment/vessels, etc.

Businesses may own or lease trucks, vehicles and equipment and shipping/receiving facilities or terminals. Businesses may opt to subcontract lease operators to provide trucking/delivery services, while only conducting scheduling, dispatching, and billing services in-house.

Pilot vehicles may be required to escort oversized loads and are integral to this industry, while also providing occasional hot-shot services.

Businesses may utilize trucks with pickers, booms, winches, tow bars; and trailers such as low-boys, center-drop, extendible, gooseneck are examples. It is recognized specialized trucking businesses may utilize and operate flat deck trailers as well. Businesses may operate warehouse/terminal/storage yards, vehicle repair facilities and dispatch equipment. Staff requirements may include drivers, laborers, yard/warehouse workers, mechanics, dispatch/traffic/logistics staff, sales/estimators, office/administration.

Businesses in this industry may be affiliated with the Alberta Trucking Association. Towing or hauling mobile, modular or industrial camps on dollies or their own axles are also activities within this industry

General Delivery Trucking Services (Industry # 50714)

This industry describes general for-hire trucking and delivery services for the movement of various commodities and products locally, provincially, to or from Alberta and destination elsewhere in Canada or in North America. Shipment requiring the use of specialized or oilfield equipment are classified elsewhere.

Businesses may own or lease truck, vehicles and equipment and shipping/receiving facilities or terminals. Businesses may opt to subcontract lease operators to provide trucking/delivery services, while only conducting scheduling, dispatching, and billing services in-house. Terminals for consolidation and distribution and storage lay-over services are often provided. Receiving terminals, sometimes referred to as cross-dock or pool car operations for the purpose of consolidating loads for

local distribution only, is in this industry.

This industry describes for-hire delivery businesses such as couriers, mail contracting, house or office moving, bulk hauling of sand, dirt, gravel etc., dry bulk shipment of fertilizer, grain, etc., tanker trucking of petroleum, water, etc., and livestock and auto hauling and general freight services.

Vehicles and equipment in this industry are diverse: from trucks of all size such as vans flatdeck, bulk carriers, tankers, etc., also cars, bikes, pallet jacks, forklifts, warehouse/terminal/storage yards, vehicle repair facilities, dispatch equipment. Staff requirements extend from drivers, laborers (swampers), yard/warehouse workers, mechanics, dispatch/traffic/logistics staff, sales/estimators, office/administration.

Businesses in this industry may be affiliated with the Alberta Trucking Association.

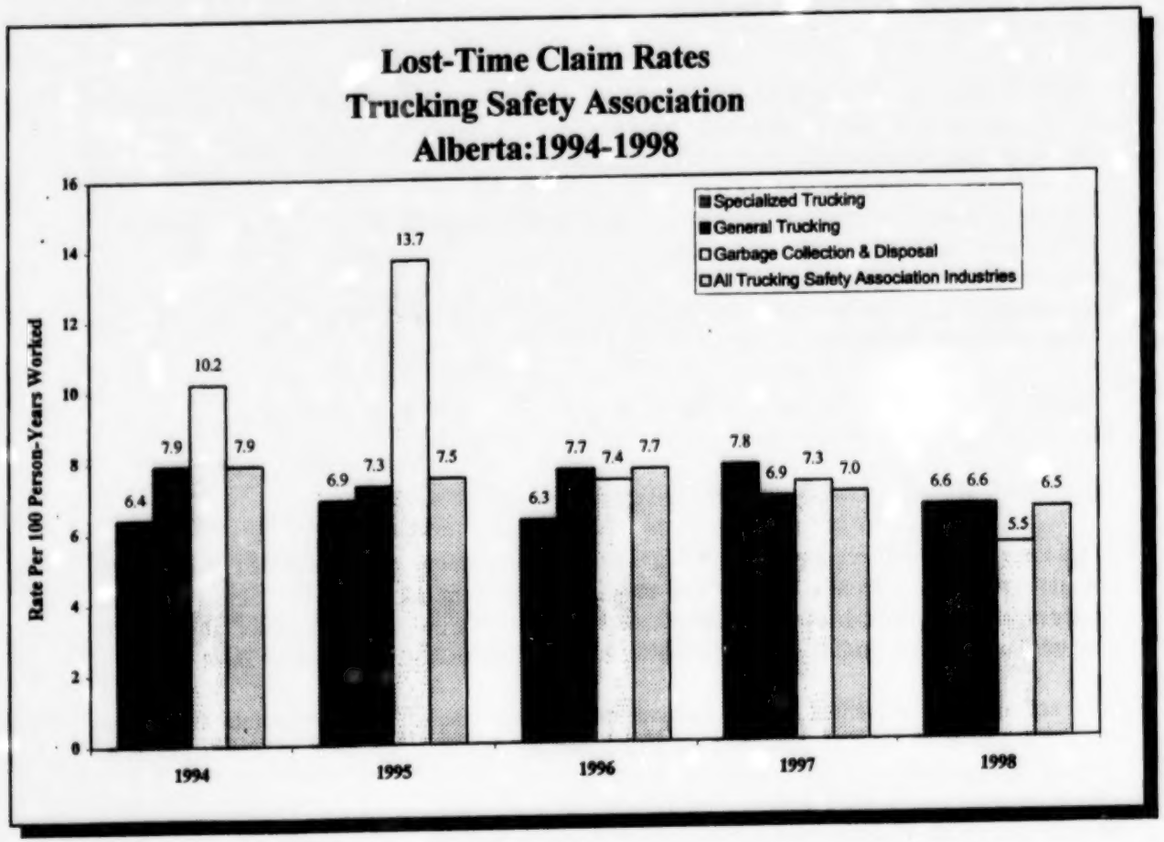
Garbage/Waste Collection & Disposal Services (Industry # 57901)

This industry includes employers providing the services of hauling and disposing of general waste or garbage from residential, commercial and industrial premises; generally using specialized equipment. This is primarily a utility services contracted to municipal governments. This industry includes operating a landfill as part of a waste collection business or as a separate business.

The collection of residential garbage involves manual labour to lift the garbage into the garbage truck. The trucks used in the collection of residential garbage are generally equipped with special box, which has hydraulic doors, to assist the garbage collectors.

Employers involved in the collection of industrial and commercial garbage generally use garbage trucks, which are equipped with hydraulic lifting devices, that pick up and empty large bins. The waste collection firm often provides these steel collection containers to the job sites.

Employers who specialized in operating a landfill, or operate a landfill as a part of garbage collection process, are classified in this classification. The equipment used by the landfills include compactors, sorters, shredders and mobile equipment.



3. Lost-Time Claim Rates & Duration Rates

All Alberta Trucking Safety Association Industries

Year	# of Accounts	Cost	Person Years	Days Lost	Duration Rate	LTCs	LTC Rate
94	8,694	$10,186,334	26,105	76,184	292	2,066	7.9
95	9,218	$8,430,086	26,954	71,534	265	2,024	7.5
96	9,756	$9,465,804	30,058	82,659	275	2,301	7.7
97	10,774	$12,239,447	33,113	81,684	247	2,311	7.0
98	11,576	$12,246,013	35,758	89,317	250	2,334	6.5

3.1 Lost-Time Claim Rates & Duration Rates By Industry

50701-Specialized Trucking Services

Year	# of Accounts	Cost	Person Years	Days Lost	Duration Rate	LTCs	LTC Rate
1994	513	$497,359	1,391	5,134	369	89	6.4
1995	513	$536,105	1,314	5,694	433	91	6.9
1996	535	$556,917	1,356	3,870	285	85	6.3
1997	651	$1,110,312	1,341	6,028	450	105	7.8
1998	714	$531,213	1,372	4,816	351	90	6.6

50714-General Trucking Services

Year	# of Accounts	Cost	Person Years	Days Lost	Duration Rate	LTCs	LTC Rate
1994	8,074	$9,473,344	23,863	68,849	289	1,890	7.9
1995	8,586	$7,539,818	24,718	62,400	252	1,807	7.3
1996	9,104	$8,690,665	27,668	76,474	276	2,139	7.7
1997	9,966	$10,761,413	30,733	72,759	237	2,130	6.9
1998	10,696	$11,471,394	33,162	82,244	248	2,177	6.6

57901-Garbage Collection & Disposal

Year	# of Accounts	Cost	Person Years	Days Lost	Duration Rate	LTCs	LTC Rate
1994	107	$215,630	851	2,201	259	87	10.2
1995	121	$354,163	921	3,440	373	126	13.7
1996	117	$218,222	1,034	2,315	224	77	7.4
1997	157	$367,723	1,039	2,897	279	76	7.3
1998	166	$243,407	1,225	2,257	184	67	5.5

3.2 LTC Rates by Size[1] of Employer: 1998

Size of Employer	# of Accounts	LTCs	Person - Years	LTC Rate
A: 0<= PYs < 1	7,930	194	3,390	5.7
B: 1<= PYs < 5	2,705	258	5,505	4.7
C: 5 <= PYs < 10	422	166	2,901	5.7
D: 10 <= PYs < 20	246	233	3,408	6.8
E: 20 <= PYs < 40	135	223	3,648	6.1
F: 40 <= PYs < 100	84	305	4,963	6.1
G: PYs >=100	53	954	11,943	8.0
H: Invalid	1	1	N/A	N/A
Total	11,576	2,334	35,758	6.5

[1] Size is measured in terms of estimated person-years (PYs)

4. Analysis of the Lost-Time Claims

4.1 Nature of Injury

LOST-TIME CLAIMS ALBERTA: 1994 TO 1998	OCCURRENCE YEAR					Total	
	94	95	96	97	98	Number	Percent
SPRAIN, STRAIN	1,055	966	1,083	1,215	1,211	5,530	50.1
BRUISE, CONTUSION, CRUSHING	298	327	282	270	285	1,462	13.2
FRACTURE & DISLOCATION							
FRACTURE	199	229	259	283	287	1,257	11.4
OTHER NATURE	13	14	23	39	34	123	1.1
SUBTOTAL	212	243	282	322	321	1,380	12.5
OTHER INJURY	39	56	204	145	197	641	5.8
CUT, LACERATION, PUNCTURE	107	87	96	114	83	487	4.4
MULTIPLE INJURIES	72	74	29	30	42	247	2.2
OTHER DISEASE	21	31	78	58	51	239	2.2
ALL OTHER NATURES, UNS	262	240	247	157	144	1,050	9.5
Total	2,066	2,024	2,301	2,311	2,334	11,036	100.0

4.2 Part of Body Affected

LOST-TIME CLAIMS ALBERTA: 1994 TO 1998	OCCURRENCE YEAR					Total	
	94	95	96	97	98	Number	Percent
BACK							
LUMBAR (LOWER BACK)	458	387	140	106	97	1,188	10.8
THORACIC (UPPER BACK)	26	33	42	72	83	256	2.3
OTHER PART	184	176	491	517	516	1,884	17.1
SUBTOTAL	668	596	673	695	696	3,328	30.2
OTHER TRUNK							
SHOULDER(S)	136	139	186	162	161	784	7.1
CHEST-INCLUDES INTERNAL ORGANS	56	62	68	72	80	338	3.1
HIP(S)-INCLUDES PELVIC ORGANS	61	51	57	50	59	278	2.5
OTHER PART	35	38	27	21	22	143	1.3
SUBTOTAL	288	290	338	305	322	1,543	14.0
ANKLE(S) & FOOT(FEET)-NOT TOES							
ANKLE(S)	139	146	192	176	167	820	7.4
FOOT(FEET)-NOT ANKLES OR TOES	87	98	93	81	98	457	4.1
SUBTOTAL	226	244	285	257	265	1,277	11.6
LEG(S)							
KNEE	150	128	164	163	154	759	6.9
OTHER PART	63	69	72	70	63	337	3.1
SUBTOTAL	213	197	236	233	217	1,096	9.9
OTHER HEAD, NECK							
NECK	96	114	109	109	96	524	4.7
OTHER PART	50	55	65	70	77	317	2.9
SUBTOTAL	146	169	174	179	173	841	7.6
WRIST(S) & HAND(S)-NOT FINGERS							
WRIST(S)	61	76	72	75	90	374	3.4
HAND(S)-NOT WRISTS OR FINGERS	61	34	47	62	53	257	2.3

(CONTINUED)

Part of Body Affected(continued)

LOST-TIME CLAIMS ALBERTA: 1994 TO 1998	OCCURRENCE YEAR					Total	
	94	95	96	97	98	Number	Percent
WRIST(S) & HAND(S)-NOT FINGERS							
SUBTOTAL	122	119	119	137	143	631	5.7
FINGER(S)	100	102	117	124	103	546	4.9
MULTIPLE MAJOR BODY PARTS	81	79	126	107	146	539	4.9
ARM(S)(ABOVE WRIST)							
ELBOW	54	50	41	45	54	244	2.2
OTHER PART	38	55	53	55	60	261	2.4
SUBTOTAL	92	105	94	100	114	505	4.6
ALL OTHER PARTS, UNS	130	132	139	174	155	730	6.6
Total	2,066	2,024	2,301	2,311	2,334	11,036	100.0

4.3 Source of Injury

LOST-TIME CLAIMS ALBERTA: 1994 TO 1998	OCCURRENCE YEAR					Total	
	94	95	96	97	98	Number	Percent
VEHICLES							
HIGHWAY VEHICLES (POWERED)	288	283	335	362	368	1,636	14.8
OTHER SOURCE	105	105	96	115	122	543	4.9
SUBTOTAL	393	388	431	477	490	2,179	19.7
SOURCE-UNS	306	351	462	330	344	1,793	16.2
WORKING SURFACES							
GROUND (OUTDOORS)	140	116	126	151	163	696	6.3
OTHER SOURCE	136	145	168	170	189	808	7.3
SUBTOTAL	276	261	294	321	352	1,504	13.6
BODILY MOTION	261	242	298	270	258	1,329	12.0
BOXES, CONTAINERS							
BOXES, CRATES, CARTONS	175	157	123	127	158	740	6.7
OTHER SOURCE	105	99	64	85	90	443	4.0
SUBTOTAL	280	256	187	212	248	1,183	10.7
METAL ITEMS-NEC	126	128	104	136	119	613	5.6
WOOD ITEMS-NEC							
SKIDS, PALLETS	43	32	44	54	63	236	2.1
OTHER SOURCE	22	13	18	20	21	94	0.9
SUBTOTAL	65	45	62	74	84	330	3.0
FURNITURE & FIXTURES	52	38	57	47	57	251	2.3
HAND TOOLS-UNPOWERED	48	43	54	56	45	246	2.2
ALL OTHER SOURCES	259	272	352	388	337	1,608	14.6
Total	2,066	2,024	2,301	2,311	2,334	11,036	100.0

4.4 Type of Event

LOST-TIME CLAIMS ALBERTA: 1994 TO 1998	OCCURRENCE YEAR					Total	
	94	95	96	97	98	Number	Percent
OVEREXERTION							
LIFTING OBJECTS	274	271	284	284	299	1,412	12.8
PULLING/PUSHING OBJECTS	74	66	90	81	96	407	3.7
OTHER TYPE	216	168	162	164	177	887	8.0
SUBTOTAL	564	505	536	529	572	2,706	24.5
BODILY REACTION							
REACTION FROM INVOLUNTARY MOTION	151	99	136	88	99	573	5.2
REACTION FROM VOLUNTARY MOTION	105	82	117	110	93	507	4.6
OTHER TYPE	4	62	46	57	53	222	2.0
SUBTOTAL	260	243	299	255	245	1,302	11.8
STRUCK BY							
STRUCK BY FLYING OBJECT	9	40	109	150	117	425	3.9
OTHER TYPE	217	227	108	141	140	833	7.5
SUBTOTAL	226	267	217	291	257	1,258	11.4
FALL FROM ELEVATION							
FALL FROM VEHICLES	135	134	129	144	142	684	6.2
OTHER TYPE	72	92	109	104	119	496	4.5
SUBTOTAL	207	226	238	248	261	1,180	10.7
VEHICLE INCIDENTS							
HIGHWAY-OVERTURNED VEHICLE	69	62	40	72	74	317	2.9
OTHER TYPE	146	139	191	176	209	861	7.8
SUBTOTAL	215	201	231	248	283	1,178	10.7
FALL ON SAME LEVEL							
FALL TO WALKWAY, WORKING SURFACE	110	95	107	114	111	537	4.9
FALL ONTO OR AGAINST OBJECTS	53	53	56	44	55	261	2.4
OTHER TYPE	4	11	25	15	17	72	0.7

(CONTINUED)

Type of Event(continued)

LOST-TIME CLAIMS ALBERTA: 1994 TO 1998	OCCURRENCE YEAR					Total	
	94	95	96	97	98	Number	Percent
FALL ON SAME LEVEL							
SUBTOTAL	167	159	188	173	183	870	7.9
CAUGHT IN, UNDER OR BETWEEN	114	104	95	117	103	533	4.8
STRUCK AGAINST							
STRUCK AGAINST STATIONARY OBJECT	50	46	50	48	43	237	2.1
OTHER TYPE	19	30	37	47	60	193	1.7
SUBTOTAL	69	76	87	95	103	430	3.9
ALL OTHER TYPES, UNS	244	243	410	355	327	1,579	14.3
Total	2,066	2,024	2,301	2,311	2,334	11,036	100.0

4.5 Duration of Disability

LOST-TIME CLAIMS ALBERTA: 1994 TO 1998	OCCURRENCE YEAR					Total	
	94	95	96	97	98	Number	Percent
01 - 05 DAYS LOST	594	625	690	705	686	3,300	29.9
06 - 10 DAYS LOST	305	268	333	318	307	1,531	13.9
11 - 15 DAYS LOST	175	169	188	166	210	908	8.2
16 - 20 DAYS LOST	119	114	134	125	120	612	5.5
21 - 30 DAYS LOST	170	165	172	200	177	884	8.0
31 - 40 DAYS LOST	115	105	128	133	125	606	5.5
41 - 50 DAYS LOST	91	87	101	92	95	466	4.2
51 OR MORE DAYS LOST	467	449	507	508	564	2,495	22.6
DAYS LOST-UNSPECIFIED, 0	30	42	48	64	50	234	2.1
Total	2,066	2,024	2,301	2,311	2,334	11,036	100.0

5. Characteristics of the Injured Worker

5.1 Occupation of Injured Worker

LOST-TIME CLAIMS ALBERTA: 1994 TO 1998	OCCURRENCE YEAR					Total	
	94	95	96	97	98	Number	Percent
TRANSPORT OPERATORS							
TRUCK DRIVERS	1,404	1,327	1,483	1,527	1,548	7,289	66.0
OTHER OCCUPATION	30	17	24	32	32	135	1.2
SUBTOTAL	1,434	1,344	1,507	1,559	1,580	7,424	67.3
MATERIALS HANDLING-NEC							
FREIGHT HANDLERS, STEVEDORES	213	192	194	220	225	1,044	9.5
OTHER OCCUPATION	79	68	51	73	67	338	3.1
SUBTOTAL	292	260	245	293	292	1,382	12.5
CLERICAL							
MESSENGERS	54	42	80	50	63	289	2.6
OTHER OCCUPATION	31	50	36	57	64	238	2.2
SUBTOTAL	85	92	116	107	127	527	4.8
FABRICATING, REPAIR	76	67	57	85	73	358	3.2
ALL OTHER OCCUPATIONS, UNS	179	261	376	267	262	1,345	12.2
Total	2,066	2,024	2,301	2,311	2,334	11,036	100.0

5.2 Age of Injured Worker

LOST-TIME CLAIMS ALBERTA: 1994 TO 1998	OCCURRENCE YEAR					Total	
	94	95	96	97	98	Number	Percent
15-19 YEARS	59	33	55	74	58	279	2.5
20-24 YEARS	215	211	223	215	259	1,123	10.2
25-34 YEARS	720	700	718	736	665	3,539	32.1
35-44 YEARS	619	633	727	727	719	3,425	31.0
45-54 YEARS	317	307	398	367	419	1,808	16.4
55-64 YEARS	124	131	158	171	185	769	7.0
65 YRS AND OVER	10	5	17	17	27	76	0.7
AGE-UNSPECIFIED	2	4	5	4	2	17	0.2
Total	2,066	2,024	2,301	2,311	2,334	11,036	100.0

5.3 Length of Time Employed

LOST-TIME CLAIMS ALBERTA: 1994 TO 1998	OCCURRENCE YEAR					Total	
	94	95	96	97	98	Number	Percent
A. LESS THAN 1 MONTH	170	143	117	185	158	773	7.0
B. 1 MONTH TO < 6 MONTHS	469	422	410	492	445	2,238	20.3
C. 6 MONTHS TO < 1 YEAR	256	283	240	243	287	1,309	11.9
D. 1 YEAR OR MORE	900	880	892	798	840	4,310	39.1
E. TIME-UNSPECIFIED	271	296	642	593	604	2,406	21.8
Total	2,066	2,024	2,301	2,311	2,334	11,036	100.0

5.4 Gender of Injured Worker

LOST-TIME CLAIMS ALBERTA: 1994 TO 1998	OCCURRENCE YEAR					Total	
	94	95	96	97	98	Number	Percent
MALE	1,953	1,904	2,127	2,115	2,132	10,231	92.7
FEMALE	104	106	125	139	161	635	5.8
GENDER-UNSPECIFIED	9	14	49	57	41	170	1.5
Total	2,066	2,024	2,301	2,311	2,334	11,036	100.0

6. Number of Employers That Received/Renewed a CoR In 1998

	Certified Employers	Cert. & Uncert. (# of Accounts)	% Certified
Industry 50701-Specialized Trucking Services	12	714	1.7%
Industry 50714-General Trucking Services	71	10,696	0.0%
Industry 57901-Garbage Collection & Disposal	0	166	0.0%
Alberta Trucking Safety Association Industries	**83**	**11,576**	**0.7%**

7. Coat of Claims, Payroll and Premiums

All Trucking Safety Association Industries

	Occurrence Year				
	1994	1995	1996	1997	1998
Transaction Year					
1994	$7,920,560				
1995	$4,610,188	$6,621,403			
1996	$2,132,432	$4,976,500	$7,117,234		
1997	$1,659,553	$2,205,727	$5,476,088	$8,650,574	
1998	$1,607,080	$3,371,692	$2,469,664	$6,317,210	$8,889,742
Total Cost	$17,929,813	$17,175,322	$15,062,986	$14,967,784	$8,889,742
Total Payroll	$645,700,213	$62,871,874	$748,500,782	$857,666,761	$919,412,443
Total Premiums	$44,177,192	$40,043,786	$39,959,311	$38,220,144	$31,971,689

The above cost for claims, total payroll, total premiums are for the five year period 1994 through 1998. The data is as at July, 1999.

The claim cost amount reflect only paid cost on claims which have occurred in the five year period. The costs are tracked by the occurrence year and the year that the cost were transacted.

Employer payrolls have been totaled for each year. The premiums is the total of employer's premiums paid for each year.

7.1 Cost of Claims, Payroll and Premiums by Industry

Specialized Trucking Services

	Occurrence Year				
	1994	1995	1996	1997	1998
Transaction Year					
1994	$335,284				
1995	$248,538	$312,116			
1996	$142,606	$231,245	$389,272		
1997	$29,613	$108,459	$219,791	$630,162	
1998	$148,336	$84,822	$49,417	$547,824	$416,424
Total Cost	$904,377	$736,641	$658,480	$1,177,986	$416,424
Total Payroll	$28,359,045	$29,660,792	$31,441,969	$39,022,390	$42,207,570
Total Premiums	$3,312,638	$2,409,455	$1,952,436	$2,097,219	$1,815,607

General Trucking Services

	Occurrence Year				
	1994	1995	1996	1997	1998
Transaction Year					
1994	$7,415,237				
1995	$4,247,634	$6,004,280			
1996	$1,945,681	$4,597,958	$6,556,566		
1997	$1,625,726	$2,050,667	$5,001,121	$7,775,008	
1998	$1,438,817	$3,252,498	$2,266,680	$5,478,808	$8,274,856
Total Cost	$16,673,095	$15,905,403	$13,824,367	$13,253,816	$8,274,856
Total Payroll	$594,440,057	$623,266,280	$690,372,035	$789,138,452	$843,528,415
Total Premiums	$39,779,629	$36,325,332	$36,801,437	$34,982,754	$29,125,865

Garbage Collection & Disposal

	Occurrence Year				
	1994	1995	1996	1997	1998
Transaction Year					
1994	$170,038				
1995	$114,017	$305,008			
1996	$44,145	$147,296	$171,396		
1997	$4,214	$46,601	$255,176	$245,404	
1998	$19,927	$34,373	$153,567	$290,577	$198,462
Total Cost	$352,341	$533,278	$580,139	$535,982	$198,462
Total Payroll	$22,901,111	$24,137,087	$26,686,778	$29,505,919	$33,676,458
Total Premiums	$1,084,925	$1,308,999	$1,205,438	$1,140,170	$1,030,218

8. WCB Accepted Occupational Fatalities

A WCB accepted occupational fatality is the death of a worker which results from a work-related incident or exposure and which has been accepted by the WCB for compensation. Alberta Human Resources and Employment classifies occupational fatalities into three general categories: motor vehicle collision, workplace incident and occupational disease. Each of these is described below.

Motor Vehicles Incidents
Motor vehicles incidents typically involve a non-industrial vehicles operating on public roads in which the fatally injured worker was either a driver or a passenger. This category also includes fatalities involving air plane crashes, train crashes, helicopter crashes etc.

Workplace Incidents
Fatal workplace incidents consist of cases in which the worker dies at a work site, or as a result of injuries sustained at a work site. This is the type of fatality that Alberta Human Resources and Employment typically investigates.

Occupational Disease
Occupational diseases are diseases known to be primarily or exclusive work-related. Occupational diseases are usually diagnosed many years after the initial or crucial exposure to the toxic substance, and in such cases it is very difficult to determine when the exposure occurred. ***This category should, therefore, not be interpreted to reflect present work site hazards***. This category also includes heart attacks suffered on the job.

Description of Alberta Trucking Safety Association Industry
Fatalities Accepted by the WCB
Alberta, 1993-1998

YEAR	Occupational Diseases		Motor Vehicle Incidents		Workplace Incidents		Total	
	N	%	N	%	N	%	N	%
1993	0	0.0	10	83.3	2	16.7	12	100
1994	0	0.0	11	68.8	5	31.3	16	100
1995	0	0.0	7	87.5	1	12.5	8	100
1996	0	0.0	5	62.5	3	37.5	8	100
1997	2	11.1	14	77.8	2	11.1	18	100
1998	1	7.1	11	78.6	2	14.3	14	100
Total	3	3.9	58	76.3	15	19.7	76	100

9. OHS Investigated Occupational Fatalities:1993-1998

General Trucking Services (10)

YEAR: 1993 FILE: 0760
OCCUPATION: Truck Driver AGE: 23
INDUSTRY: Truck/Courier/Delivery Service
EXPERIENCE: 2 Weeks

DESCRIPTION: The owner operator of a dump truck placed a full dump box from a construction site directly on top of an empty gravel truck box. The dump box was secured to the gravel box with two chains. While raising the dump box to empty the waste material one of the chains tightened around the Hydraulic lift cylinder, bending it slightly. The operator climbed up and tried to free the chain using a steel pipe for extra leverage. The steel pipe snapped and struck the operator in the head.

YEAR: 1994 FILE: 0790
OCCUPATION: Truck Driver AGE: 26
INDUSTRY: Transportation
EXPERIENCE: number of years unknown

DESCRIPTION: Investigation closed - Federal jurisdiction
NO FATALITY REPORT

YEAR: 1994 FILE: 0797
OCCUPATION: unknown AGE: 60
INDUSTRY: Truck/courier/delivery Service
EXPERIENCE: unknown

DESCRIPTION: Investigation closed - Federal jurisdiction
NO FATALITY REPORT

YEAR: 1995 FILE: 0824
OCCUPATION: Truck Driver AGE: 29
INDUSTRY: General Trucking Services
EXPERIENCE: 9 years

DESCRIPTION: A worker was pumping crude oil/condensate from a horizontal swab unit to a tank truck. The worker parked the truck with the vents upwind from his work station. During the loading process, valves on both the scrubber and free air vents on the truck were left open. H_2S gases vented from the truck, and were blown down into a low area adjacent to the cab of the truck. The worker was not wearing an H_2S monitor. As he tried to access the work side of the pressure vessel he walked through the cloud of H_2S and was overcome and died.

YEAR: 1996 FILE: 0836
OCCUPATION: Truck Driver AGE: 40
INDUSTRY: Trucking Service
EXPERIENCE: 14 years

DESCRIPTION: A truck driver travelling in the area south of Lac La Biche became caught in a ditch, with his trailer at an incline. The driver attempted to back the caterpiller crawler he was carrying off his truck trailer. The crawler suddenly flipped 180 degrees over, landing on the driver causing fatal injuries

YEAR: 1997 FILE: 0855
OCCUPATION: Truck Driver AGE: 52
INDUSTRY: Trucking Services, General
EXPERIENCE: 15 years

DESCRIPTION: The worker was employed as an owner/operator truck driver for a gravel haul on a secondary highway. The driver was manoeuvring around a curve on the crest of a hill and the truck lifted and flipped onto its cab. The vehicle roof collapsed and the driver was fatally injured due to asphyxia.

YEAR: 1997 FILE: 0868
OCCUPATION: Truck Driver AGE: 41
INDUSTRY: Trucking Services - General
EXPERIENCE: Unknown

DESCRIPTION: The roadbuilding crew arrived at the site around noon to prepare the road for paving. A skid steer loader was in operation spreading materials and doing final preparations in the alley. A grader was also in operation carrying out the same work. A tandem dump truck was positioned to unload. The skid steer loader was being operated between the sidewalk and the tandem dump truck. The skid steer loader operator was "back blading" material (operating the skid steer in reverse, positioning the front edge of the bucket down so a smooth, properly graded aggregate bed could be prepared. The skid steer loader was "back-blading" when it came in contact with the tandem dump truck driver. The truck driver received crushing injuries when he was pinned between the stationary tandem dump truck and the skid steer loader, resulting in death.

YEAR: 1998 FILE: 0890
OCCUPATION: Truck Driver AGE: 37
INDUSTRY: Trucking, General Delivery Services
EXPERIENCE: 19 years

DESCRIPTION: Two workers were preparing to remove bundled piping that was on a transport trailer. The bundled piping was positioned on the trailer in two loads, a front load and a rear load. The truck driver removed the straps securing the rear load and the forklift operator positioned his equipment to start the process of unloading the piping. The truck driver was removing the final strap securing the front load of piping, when a bundle of piping was dislodged, crushing the truck driver against the railing of the transport trailer and fatally injuring him.

YEAR: 1998 FILE: 0902
OCCUPATION: Truck Driver AGE: 51
INDUSTRY: Trucking, General Delivery Services
EXPERIENCE: Unspecified

DESCRIPTION: A truck driver sustained fatal injuries when the loaded semi-trailer he was operating rolled upside down in a ditch on an oil lease road. He was employed by a trucking company that was contracted to transport oil and water from production wells to a treating facility. The worker failed to negotiate a curve in the road and the truck rolled, crushing the driver in the cab.

Specialized Trucking Services (2)

YEAR: 1998 FILE: 0899
OCCUPATION: Load Specialist AGE: 49
INDUSTRY: Specialized Trucking Service
EXPERIENCE: 7 years

DESCRIPTION: A combination trailer is a multiple-axle unit that can be used to move oversized loads. The trailer involved in the incident has four components. The last, the rear dolly, is comprised of two or three axles, and can be steered by an operator who uses a cable and remote control. This steering allows the unit to manoeuvre in areas where it would be impossible to negotiate curves and turns due to the length of the tractor and trailer. The total length of the Kenworth tractor and combination trailer was 48.5 metres.

A 50 000 kg skid mounted gas processing unit was being transported from the manufacturer's yard. The skid was loaded on the tractor trailer unit and was being moved through the yard. The tractor became stuck in a muddy area and another tractor on site was used to pull the unit on to dry solid ground. The loaded tractor then proceeded to back up and a 2.4 metre projection on the right side came close to another skid stored in the yard. In an effort to clear the load past the obstacle, the load specialist in consultation with the driver decided to steer the rear dolly about one metre to the left. Unknown to the driver, the load specialist positioned himself from the right side of the rear dolly to its left side, directly in front of a set of wheels. The vehicle started to move forward slowly and suddenly accelerated as it regained traction. The load specialist, who was in radio contact with the driver but could not be seen by him, was run over and killed by the tires on the rear dolly.

YEAR: 1997 FILE: 0884
OCCUPATION: Truck Driver - Owner /Operator AGE: 36
INDUSTRY: Specialized Trucking Service
EXPERIENCE: 5 years

DESCRIPTION: The owner/operator of a tractor-trailer unit was engaged in delivering farm feed to a farm. He had completed off-loading the product into farm supplied storage bing adjacent to the farm access road. The operator had parked the unit under a 14,400 volt overhead power line with a ground clearance of 7.2 metres, to off-load into the last storage bin. The operator was carrying a fully extended 3 metre aluminium handled telescoping broom, climbed the ladder at the rear of the trailer to sweep out the trailer unit bins. The owner/operator swung the head of the broom up over his shoulders and contacted the power line resulting in fatal injuries.

Garbage Collection and Disposal (0)

Appendix A: Terms, Definitions, and Formulas

Lost-Time Claim

A lost-time claim (LTC) is a claim for an occupational injury or disease which disables the worker beyond the day of injury. Included are claims for which wages compensation are paid, permanent disability claims, fatalities, and cases in which the injured worker is assigned light duties or other modified work.

Person-Years

Person-year estimates are calculated from wage and payroll data provided by account holders to the WCB. Alberta Labour uses these data to estimate. An average industry wage, and uses the average industry wage and employer payroll data to estimate person-years foe each employer and each industry. One person-year is equivalent to one full-time worker working for one year, and can be assumed to equal 2,000 hours worked.

LTC Rate

The lost-time claim (LTC) rate is calculated by dividing the number of lost-time claims by the person-year estimate, and multiplying the result by 100. The LTC rate represent the probability or risk of disabling injury or disease to a worker during a period of one year's work. Comparisons of LTC rates between industries, or between years, can be used to indicate increases, decreases, or differences in this risk.

$$\text{LTC Rate} = \frac{\text{Number of LTCs X 100}}{\text{Estimated Person-years}}$$

Duration (Days Lost)

The duration of disability is the number of days following the injury or disease for which the worker was disabled, and unable to perform normal work duties. This information is obtained for this report from data on compensation days paid on each claim from WCB. Alberta Labour obtains these data on March 31 of the year following the claim year, and does not update the information, even though many injured workers continue to be disabled beyond this date. As a result, the duration information reported here underestimates the true impact of lost-time injury and disease.

Duration Rate

The duration rate is calculated by dividing the number of work days lost (disability days) by the person-year estimate, and multiplying by 100. The result is expressed as "days lost per 100 person-years worked", and indicates, in part, the economic impact of occupational injury and disease. Duration rates are not recommended as reliable indicators of full economic cost. In addition, readers are warned that duration rates are highly unstable when based on only a few lost-time claims; it is recommended that the duration rate not be calculated based upon fewer than 30 lost-time claims.

$$\text{Duration Rate} = \frac{\text{Disability Days X 100}}{\text{Estimated Person-Years}}$$

NEC Means "Not Elsewhere Classified"

UNS Means "Unspecified"

Appendix B: Trucking Safety Association 1998 Industry Codes

Industry 50701~ Specialized Trucking Services

Industry 50714~ General Trucking Services

Industry 57901~ Garbage Collection & Disposal